UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,613	03/17/2004	Mauri Kangas	004770.00195	1921

22907   7590   01/24/2008
BANNER & WITCOFF, LTD.
1100 13th STREET, N.W.
SUITE 1200
WASHINGTON, DC 20005-4051

EXAMINER
ZHU, BO HUI ALVIN

ART UNIT	PAPER NUMBER
2619	

MAIL DATE	DELIVERY MODE
01/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/801,613	KANGAS ET AL.
	Examiner	Art Unit	
	Bo Hui A. Zhu	2619	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>17 March 2004</u>.

2a) ☐ This action is **FINAL**.　　2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-47</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-47</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>17 March 2004</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☒ All　b) ☐ Some * c) ☐ None of:

　　　1. ☒ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions
> and requirements of this title.

2.   Claims 11 and 35 are rejected under 35 U.S.C. 101 because the claimed invention

is directed to non-statutory subject matter.

A claim drawn to a "computer program" does not constitute statutory subject matter

such as a process, machine, article of manufacture or composition of matter. In contrast, a

claimed computer-readable medium encoded or embodied with a computer program

product of code, or instructions, is a computer element which, when executed by a

computer, defines structural and functional interrelationships between the instructions and

the computer to permit the instructions functionality to be realized, and is thus statutory.

Please see pages 30 and 53 of the Interim Guidelines for Examination of Patent

Applications for Patent Subject Matter Eligibility

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or
> on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1 – 4, 7, 8, 11 – 15, 18, 19, 22 – 25, 27, 28, 34 – 37 and 43 - 45 are rejected

under 35 U.S.C. 102(b) as being anticipated by the Applicant Admitted Prior Art (AAPA)

(pages 1 and 2 of the specification; "One mechanism ... receiving device can decrypt it

accordingly").

(1) with regard to claims 1, 11 and 12:

The AAPA discloses a system and method, comprising: encapsulating the data

according to a first protocol to produce a data packet (page 1, last paragraph, lines 4 – 6);

mapping the data packet onto a transport packet (page 1, last paragraph, lines 8 – 9);

encoding filtering information in a filtering field included in the transport packet (page 1, 1st

paragraph, lines 1 - 8; also disclosed in the EN 301 192 reference, which was cited by the

Applicant as prior art, as the MAC address of the destination is used as filtering information

for identifying the intended recipients of the packet); and repeatedly transmitting the

transport packet using a data carousel mechanism (page 1, last paragraph, lines 11 - 12).

(2) with regard to claim 23:

The AAPA disclose a method and system, comprising: forming a header containing

an identifier relating to a data carousel (see Table 2-2 of the ISO/IEC reference, which was

cited by the Applicant as prior art, the PID is the identifier); forming a payload comprising

data to be transmitted to one or more users of one or more receiving devices (a payload

portion is inherent to a MPEG-2 transport packet for storing the data to be transmitted);

and forming a filtering field containing filtering information relating to said one or more

receiving devices (page 1, 1st paragraph, lines 1 - 8; also disclosed in the EN 301 192

reference, which was cited by the Applicant as prior art, as the MAC address of the

destination is used as filtering information for identifying the intended recipients of the

packet).

(3) with regard to claims 27, 35 and 36:

The AAPA discloses a system and method, comprising: encapsulating the data

according to a first protocol to produce a data packet (page 1, last paragraph, lines 4 – 6);

mapping the data packet onto a transport packet (page 1, last paragraph, lines 8 – 9);

incorporating within the transport packet payload scrambling control mode information

relating to an encryption status of the data packet mapped onto said transport packet

(payload_scrambling_control field in Table 3 of the EN 301 192 reference); and repeatedly

transmitting the transport packet using a data carousel mechanism (page 1, last

paragraph, lines 11 - 12).

(4) with regard to claim 45:

The AAPA disclose a method and system, comprising: forming a header containing

an identifier relating to a data carousel (see Table 2-2 of the ISO/IEC reference, which was

cited by the Applicant as prior art, the PID is the identifier); forming a payload scrambling

control mode field containing scrambling control mode information, said scrambling control

mode information being unrelated to a an encryption status of said header. (the

payload_scrambling_control field in Table 3 of the EN 301 192 reference).

(5) with regard to claims 2, 13, 24:

The AAPA further disclose the filtering information is a part or whole of an address

associated with one or more data receiving devices (disclosed in the EN 301 192

reference in which the MAC address of the destination is used as filtering information for

identifying the intended recipients of the packet).

(3) with regard to claims 3, 14:

The AAPA further discloses the address is an IP or MAC address (disclosed in the

EN 301 192 reference in which the MAC address of the destination is used as filtering .

information for identifying the intended recipients of the packet)

(4) with regard to claims 4, 15, 34 and 43:

The AAPA further discloses the data packet is mapped onto an MPEG-2 transport

packet (page 1, last paragraph, line 8).

(5) with regard to claims 7, 18, 25:

The AAPA further discloses the step of mapping the data packet comprises

encoding scrambling information indicating a scrambling control mode of the data packet,

said scrambling information being unrelated to a scrambling control mode of the transport

packet (payload_scrambling_control field in Table 3 of the EN 301 192 reference).

(6) with regard to claims 8, 19:

The AAPA further disclose the data packet contains reserved bits and the step of

mapping the data packet onto the transport packet comprises replacing said reserved bits

with the scrambling information (see Table 3, 2 reserved bits have been used for

representing the payload_scrambling_control field).

(7) with regard to claims 22 and 44:

The AAPA disclose all of the subject matter as discussed in the rejection of claim 12

and further discloses a DVB communication network; and one or more receiving devices (a

DVB data carousel is a DVB communication network and contains at least one receiving

device).

(8) with regard to claims 28 and 37:

The AAPA discloses the first protocol is defined by the DSM-CC standard and the

data is encapsulated according to the DSM-CC datagram section format (page 1, lines 4 -

7).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
> in section 102 of this title, if the differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at the time the invention was
> made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall
> not be negatived by the manner in which the invention was made.

6.   Claims 5, 6, 9, 16, 17, 20, 29, 31, 38 and 40 are rejected under 35 U.S.C. 103(a) as

being unpatentable over the Applicant Admitted Prior Art (AAPA) ((pages 1 and 2 of the

specification; "One mechanism ... receiving device can decrypt it accordingly").

(5) with regard to claims 5, 16, 29 and 38:

The AAPA further discloses the data is an MMS message (the EN 301 192

reference discloses video and audio data or messages are transmitted with MPEG-2

packets) and is encapsulated according to the DSM-CC datagram section format with a

table id within the range 0x40 to 0xFF (the EN 301 192 reference, on page 13, discloses

that the table id should be set to 0x3E).

Although the AAPA does not disclose the table id is within the range of 0x40 to

0xFF, it would have been obvious matter of design choice to set the table id value to either

0x3E, or a value within the rage of 0x40 to 0xFF, and it appears that the system would

perform equally well with the value of the table id set to any one value as stated above.

(2) with regard to claims 6, 17, 31 and 40:

The AAPA further discloses the first protocol is a DSM-CC protocol (page 1, last

paragraph, lines 4 – 7). Although the AAPA does not specifically disclose the location and

format of the filtering information corresponds to a location and format of filtering

information in a transport packet formed from the same data when encapsulated according

to a DVB-MPE protocol, the DSM-CC and DVB-MPE protocols are very similar and

compliant to each other, and the EN 301 192 reference discloses a location and format of

the filtering information according to a DVB-MPE protocol (see Table 3 and related content

on Fig. 13). Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to use the location and format of the filtering information as disclosed

in the EN 301 192 reference in order to improve the system compatibility with the DVB-

MPE protocol.

(3) with regard to claims 9, 20:

Although the AAPA does not specifically disclose the location and format of the

scrambling information corresponds to a location and format of scrambling information in a

transport packet formed from the same data when encapsulated according to a DVB-MPE

protocol, the DSM-CC and DVB-MPE protocols are very similar and compliant to each

other, and the EN 301 192 reference discloses a location and format of the scrambling

information according to a DVB-MPE protocol (see Table 3 and related content on Fig. 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to use the location and format of the scrambling information as disclosed in the

EN 301 192 reference in order to improve the system compatibility with the DVB-MPE

protocol.

7.   Claims 10, 21, 26, 30, 32, 33, 39, 41, 42, 46 and 47 are rejected under 35 U.S.C.

103(a) as being unpatentable over the Applicant Admitted Prior Art (AAPA) ((pages 1 and

2 of the specification; "One mechanism ... receiving device can decrypt it accordingly") in

view of Akachi (US 7,069,436).

(1) with regard to claims 10, 21, 26, 30, 32, 33, 39, 41, 42, 46 and 47:

The AAPA does not specifically disclose the scrambling information comprises a

first bit indicating whether or not the data packet has been scrambled, wherein, if the data

packet has been scrambled, the second bit indicates a scrambling control mode.

Akachi teaches a similar method in which the scrambling information comprises a

first bit indicating whether or not the data packet has been scrambled, wherein, if the data

packet has been scrambled, the second bit indicates a scrambling control mode (column

15, line 52 – column 16, line 3).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify the system of the AAPA with the teaching from Akachi in order to

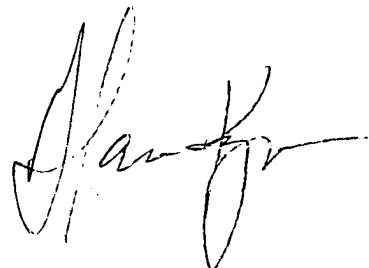achieve greater conformity with the DVB specification.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bo Hui A. Zhu whose telephone number is (571)270-1086. The examiner can normally be reached on Mon-Thur 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BZ
Examiner
January 16, 2008

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600